## Amendments to the Claims

1. (Original) A method for producing an optically active β-amino acid of formula (2),

$$\begin{array}{c|c}
 & \text{NH}_2 \cdot bX' \\
 & 0 \\
 & R^1 \\
 & R^2
\end{array}$$
(2)

, wherein b is 0 or 1; the symbol \* shows that the carbon atom is a chiral carbon; R<sup>1</sup> is a hydrogen atom, an alkyl group, a substituted alkyl group, a cycloalkyl group, a substituted cycloalkyl group, an aralkyl group, a substituted aralkyl group, an aryl group, a substituted aryl group, an aliphatic heterocyclic group, a substituted aliphatic heterocyclic group, an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an alkoxy group, a substituted alkoxy group, an aralkyloxy group, a substituted aralkyloxy group, an aryloxy group or a substituted aryloxy group; R<sup>2</sup> is a hydrogen atom, an alkyl group, a substituted alkyl group, a cycloalkyl group, a substituted cycloalkyl group, an aralkyl group, a substituted aralkyl group, an aryl group, a substituted aryl group, an aliphatic heterocyclic group, a substituted aliphatic heterocyclic group, an aromatic heterocyclic group, a substituted aromatic heterocyclic group, an alkoxy group, a substituted alkoxy group, an aralkyloxy group, a substituted aralkyloxy group, an aryloxy group, a substituted aryloxy group, an alkyloxycarbonyl group or an aralkyloxycarbonyl group; R<sup>3</sup> is an alkoxy group, a substituted alkoxy group, an aralkyloxy group, a substituted aralkyloxy group, an aryloxy group, a substituted aryloxy group, an amino group or a substituted amino group, X' is an acid, and R<sup>1</sup> and R<sup>2</sup> or R<sup>2</sup> and R<sup>3</sup> may be combined together to form a ring provided that R<sup>1</sup> and R<sup>2</sup> are not a hydrogen atom simultaneously, which comprises subjecting an enamine of formula (1),

$$R^{1} \xrightarrow{\text{NH}_{2} \cdot aX'} R^{3}$$
 (1)

, wherein  $R^1$ ,  $R^2$ ,  $R^3$  and X' have the same meanings as described above, and a is 0 or 1, to an asymmetric hydrogenation.

- 2. (Original) The method as claimed in claim 1, wherein the asymmetric hydrogenation is carried out in the presence of an acid.
- 3. (Original) The method as claimed in claim 1, wherein the asymmetric hydrogenation is carried out in the presence of a fluorine-containing aliphatic alcohol.
- 4. (Currently Amended) The method as claimed in any of claims 1 to 3, wherein the asymmetric hydrogenation in carried out in the presence of a catalyst for the asymmetric hydrogenation.
- 5. (Original) The method as claimed in claim 4, wherein the catalyst for the asymmetric hydrogenation is a transition metal complex.
- 6. (Original) The method as claimed in claim 5, wherein the transition metal complex is a complex of a metal which belong to the eighth group of the periodic table.

- 7. (Currently Amended) The method as claimed in either claim 5 or claim 6, wherein the transition metal complex has a chiral ligand.
- **8. (Original)** The method as claimed in claim 7, wherein the chiral ligand is a chiral phosphine ligand.
- 9. (Original) The method as claimed in claim 1, wherein the asymmetric hydrogenation is carried out in the presence of an acid and a fluorine-containing aliphatic alcohol.
- 10. (New) The method as claimed in claim 2, wherein the asymmetric hydrogenation in carried out in the presence of a catalyst for the asymmetric hydrogenation.
- 11. (New) The method as claimed in claim 3, wherein the asymmetric hydrogenation in carried out in the presence of a catalyst for the asymmetric hydrogenation.
- 12. (New) The method as claimed in claim 6, wherein the transition metal complex has a chiral ligand.